111.01 STATEMENT OF LABOR AND MATERIALS USED (FHWA-47)

Form FHWA-47 must be prepared and submitted for most completed federal-aid projects that exceed \$1,000,000 combined total cost for roadways and bridges. (See Form FHWA-1273, Required Contract Provisions.) This form will not be required on those contracts that consist primarily of the installation of protective devices at railroad grade crossings, and beautification projects. Where a single contract covers more than one project, only one form should be submitted.

This form provides data on quantities of material and labor used for various types of highway construction and shall be prepared in accordance with the instructions printed on the reverse side. The Contractor is responsible for furnishing the data for the materials, supplies, and labor portion of the form. The Resident shall be responsible for furnishing the other miscellaneous information required, checking the contractor's figures for reasonableness, and submitting the original to the Financial Control Section.

Form FHWA-47 should be submitted by the contractor as soon as possible after completion of the contract in order that his final payment will not be delayed. It will be submitted with the final estimate (ITD-1009). (See Financial Accounting Manual Section 19-10.3.9.2).

Exhibit 111.01-1 is an example of Form FHWA-47 showing the proper method of preparing the form in accordance with the instructions printed on the back of the form.

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6)					4505 4055 5				NO. 2125-0033	
Fede	respiration real Highwa unistration	CONTRACTORS		NT OF MATERIALS A GHWAY CONSTRUCT				FUN	IDS		
	To be o	completed by Washington Head		2		4 5 8	9		1 12 13		
	Personnel 18 19									33	
C A R D	STAT	STATE COUNTY				FEDERAL PROJECT NO.* URBAN () RURAL ()*					
	ITEM DESCRIPTION			ROADWAY	BRIDGE (Over 20 ft) DATE			STARTED.			
	CONSTRUCTION TYPE CODES										
	1	LENGTH OF PROJECT	MILES					COMPLETED.			
	2	FINAL* CONSTRUCTION COST	DOL		TOTAL				NO. BRIDGES		
	PART B To be completed by; contractor - see instruc					tions on reverse (REMARKS Attach a plain sheet of paper)					
	3	3 LABOR* TOTAL PROJECT		TOTAL LABOR-HOURS	GROSS EARNINGS				SIZE (In.)	Y PIPE	
CARD B CARD CARD CARD E	ITEM	DESCRIPTION	UNIT	PROJECT QUANTITY	CULVERT ITEMS SIZE (In.) LGTH (Lm It. 25 CORR. STEEL CUILVERT CHAPTER CCAPTER CC	CULVERT IT	EMS	CARDK	3122 (111.)	LGTH (Lin ft)	
	4	TOTAL COST OF ALL MATERIALS & SUPPLIES*	DOL.								
	5	PETROLEUM PRODUCTS*	GAL.	11						,	
	6	CEMENT	BBL. LB.								
	8	AGGREGATES PURCHASED	TON: CU. YD.								
	10	BITUMINOUS MATERIAL	GAL.					C A R D	28 CORR. A CUL	LUMINUM VERT	
	11	LUMBER	THSD. BD. FT.								
	12	REINFORCING STEEL	LB.								
	13	STRUCTURAL STEEL	LB.								
	14	READY-MIXED CONCRETE	CU. YD.			26 CONCRETE PIF	Έ				
	15	PREMIXED BITUMINOUS PAVING MATERIALS	TON.				L	L			
	16 17	AGGREGATES PRODUCED	TON. CU. YD.								
С	18	MISCELLANEOUS STEEL	LB.		ROJ			CARD M	29 PLAST	IC PIPE	
ARD F CARP	19	NOISE BARRIERS	LIN. FT.								
	20	GUARDRAIL	LIN. FT.								
	21	BRIDGE RAIL	LIN. FT.								
		FINAL CONTRACT AMOUNT FOR SIGNS	DOL.								
		FINAL CONTRACT AMT. FOR LIGHTING	DOL.								
		FINAL CONTRACT AMT. FOR TRAFFIC SIGNALS	DOL.								
	Blocks 48-70 to be completed by FHWA Washington Headquarters Personnel									<u> </u>	
	48	8 52 53		61 62		70					
		PORTED ON ALL REPORTS (Rev. 12-88) PREVIOUS EDITIO		VIÊWED BŶ					DATE:		

INSTRUCTIONS FOR PREPARING AND TRANSMITTING FORM FHWA-47

GENERAL REQUIREMENTS

Form FHWA-47 should be transmitted for each Federal-aid primary, urban and Interstate system project involving construction performed under contract awarded by competitive bidding, except projects for which the total final construction cost of roadway and bridge is less than \$1,000,000 or projects consisting primarily of (1) the installation of protective devices at railroad grade crossings, or (2) highway beautification.

Form FHWA-47 should be transmitted with or, if data is already available, in advance of the Final Report required by Federal-Aid Highway Program Manual Vol. 6; CH. 4; Sec. 2; Sub. Sec. 8.

As separate form should be transmitted for each contract except that data for two or more contracts on the same project may be combined when such contracts are completed at approximately the same time. In case of a combination, the earliest starting date and the latest completion date should be reported. Where a single contract covers more than one project, one form may be prepared for each project or for the entire contract, provided none of the data are duplicated. A Form FHWA-47 should not be prepared for a contract covering only the purchase of material but the quantity of material should be reported when subsequently included in a construction project. In all cases, only the original of Form FHWA-47, typed or clearly lettered, and no carbon or photocopies, should be transmitted to the Washington Office.

If nonparticipating work is included in the contract, all data should be combined with the Federal-aid data in preparing the form. Data for any subcontract must be combined by the State or the division office with the prime contract if not so combined by the prime contractor. It will be the State's responsibility to see that all prime contract and subcontract costs, material, and laborhours have been reported for each contract, and no duplication of data are involved. Quantities of State-furnished materials should be included with contract quantities. and costs of STATE-furnished materials should be added to Item 2 "Final Construction Cost" and also to Item 4 "Total Cost of All Materials and Supplies." All quantities should be reported to the nearest whole unit and only in the units specified. All costs should be reported to the nearest dollar.

Check urban or rural to indicate whether the major cost is for work within an urban area or in a rural location.

All figures should be verified for reasonableness by State highway department and Federal Highway Administration division office engineers. The total material cost and the total labor hours and gross earnings should bear reasonable relationships to the final construction cost. Also the quantity of each material reported should be reasonable with respect to the size and nature of the contract and with respect to the quantities of other materials. For example, if a large quantity of reinforcing steel is reported with no cement or ready-mixed concrete, an error of omission in reporting would be indicated.

Generally, the total cost of materials, supplies, and labor should be substantially less than the final construction cost, as the latter also includes costs of equipment ownership, overhead, and profit which are not required to be reported. If the final construction cost is less or only a few percent more than the total cost of materials, supplies and labor, the indication is that the contractor suffered a loss on the project or that there is an error in reporting. In such case, if it is determined that the figures reported are correct, a statement should be made on a plain sheet of paper marked 'Remarks' to the effect that the contractor actually did suffer a loss, (verify with contractor).

Part A- INFORMATION TO BE SUPPLIED BY FEDERAL HIGHWAY ADMINISTRATION OR STATE HIGHWAY PERSONNEL (FEDERAL-AID HIGHWAY PROGRAM, VOL. 6: CH. 1; SECT. 1; SUB. SEC. 11)

Item 1- "Length of Project." - Report official roadway mileage and official bridge mileage.

Item 2 - "Final Construction Cost" - Show best estimate of Federal and State costs incurred to date for contract items, extra work performed by contractor, and State-furnished materials.

PART B-INFORMATION TO BE SUPPLIED BY CONTRACTOR IMMEDIATELY UPON COMPLETION OF CONTRACT OR PROJECT

Specific Instructions for the Following Numbered Items: Item 3 — Report total labor-hours worked and earnings of all contractor's employees on the project, including those on operation and maintenance of equipment. Item 4 — This should be the total cost, at the jobsite, of all construction materials and supplies purchased for and used on the project, including the cost of materials for signing and lighting and the cost of any materials and supplies purchased for and used on the project, including the cost of materials for signing and lighting and the cost of any materials and supplies not specifically listed hereon. Costs of equipment or equipment rental and the cost of operating the equipment, except the costs of fuel and lubricants, should not be included in this item. Small items of equipment such as jack-hammers, handtools, repair parts, tires, etc., are not considered to be supplies. Costs of such items and also overhead costs should not be included. The amount included here for aggregates produced should be only the cost paid by the contractor for the aggregates and should not include the costs of excavating, processing, loading and hauling. Wages and labor-hours for aggregates produced should, of course, be included with Item 3. Item 5 — Report total number of gallons of all gasoline, diesel oil, lubricating oil, and grease for equipment and trucks. For conversion purposes use factor of 8 pounds of grease per gallon. Items 6 and 7 — Report quantity of cement used on project. Do not report here the cement included in Item 14.

Items 8 and 9 — Report quantity of cement used on project. Do not report here aggregates included in Items 14 and 15. Aggregates produced by the contractor shall be reported as Items 16 and 17.

Item 10 — Report number of gallons of bitumens such as asphalt and tar. Do not report here bituminous materials included in Item 20 and 20

11. Item 10 – Report number of gallons of bitumens such as asphalt and tar. Do not report here bituminous materials included in Item

and tar. Do not report here bituminous materials included in Item 15.

Item 11 - Report all lumber products purchased for and used on the project, including plywood and pressed wood, but excluding timber piling, lumber in fencing, guardrail, and signs, and lumber purchased for or used on previous projects and previously reported. The quantity of lumber should be reported as the number of thousand board feet and not as the number of board feet.

Item 12 - Report total number of pounds of reinforcement (plain or coated) for both structures and pavement. Include estimated quantities of reinforcing and prestressing steel in purchased precast units, except concrete pipe reinforcement.

Item 13 - Report total number of pounds of structural steel, steel H-piling, and sheet piling.

Item 14 - Report total number of cubic yards of ready-mixed concrete plus estimated quantity of concrete in purchased precast units, excluding Item 26.

Item 15 - Report total number of tons of bituminous paving mixtures that are purchased in a prepared condition ready for placement as they reach the job.

Items 16 and 17 - Report total quantity of aggregates such as sand, gravel, crushed stone, etc., produced by the contractor.

Item 18 - Report estimated total weight of steel products not appropriate for Items 12, 13, and 25, such as joint devices, tubular piling, etc.

Item 18 - report essentially and 25, such as joint devices, tubular piling, etc.

Items 19, 20 and 21 - Report total lengths, in linear feet, of all types of noise barriers, guardrail and bridge rail.*

Items 2 - Report final contract amount for all types of signs including foundations, posts, structural supports, etc. Do not include traffic signals.*

Item 23 - Report final contract amount for highway and bridge lighting including foundations, conduits, standards, wiring, switches, luminaires, etc. Do not include traffic signals.*

Item 24 - Report final contract amount for traffic signals.*

Item 25 - Report, by size, regardless of class, type, gauge or coating, number of linear feet of corrugated steel pipe, structural plate pipe, pipe-arches and arches.

Item 26 - Report, by size, regardless of class, type, gauge or coating, total number of linear feet of plain and reinforced concrete drain and culvert pipe.

Item 27 - Report, by size, total number of linear feet of corrugated aluminum culvert.

Item 29 - Report, by size, total number of linear feet of plastic pipe.

*Quantities of steel, concrete and lumber used in connection with Items 19, 20, 21, 22, 23 and 24 should not be reported unless difficulties are encountered in segregating such quantities from total quantities.

FORM FHWA-47 (Rev. 12-88)

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111.02 AS-CONSTRUCTED PLANS

As-constructed plans are to be made at the completion of each project, except for stockpile projects. Two copies of large size plans are sent to the district at the beginning of a project. When completed, one copy is retained in the district. The other copy is to be sent to the Roadway Design Supervisor, if roadway plans; the Bridge Design Supervisor, if major structure plans; or the Maintenance Supervisor, if building plans.

It is suggested that these plans be kept current as information becomes available during the life of the project. This will avoid a long delay in getting them completed after the job is done and will not be such a burden during the time of finaling out a project. The month and year that the project is completed should be shown on each plan sheet.

It is important that changes in utility plans also be shown on the "as-constructed" plans.

111.03 STRUCTURE SHOP DRAWINGS

Refer to Construction Manual Section 105.02 for requirements for submitting mylars or linen on shop drawings before payment of final estimate.

111.04 FINAL ESTIMATE VOUCHER (ITD-1009)

General

For detailed guidelines for preparing, coding, and submitting estimate vouchers and related accounting documents, refer to Financial Accounting Manual, Chapter 19-10, Section 10.3.

111.05 INTERSECTION AND HIGHWAY IMPROVEMENT PROJECT FORMS

Upon completion of a project, transmit, if appropriate, a copy of either Form ITD-573, Intersection Improvement Project, or ITD-574, Highway Improvement Project. (Refer to the Traffic Manual, Section 12-101.7 for examples and instructions.)

111.06 (**RESERVED**)

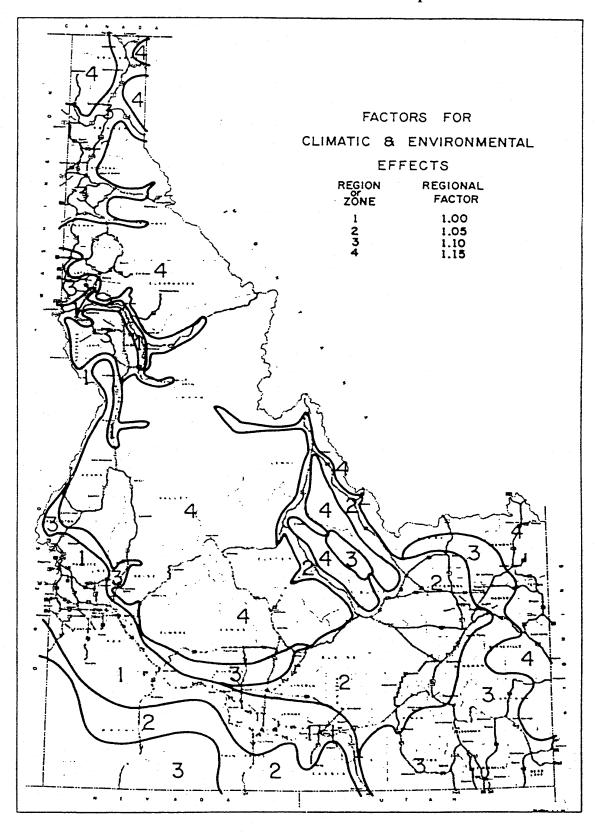
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111.07 PROJECT QUALITY EVALUATION

Upon completion of a consultant-designed project or portion of a project (i.e., bridge design), the Resident shall complete ITD-767, Project Quality Evaluation. Prior to completion of ITD-767, the Resident may wish to review the evaluation made by the District Design Engineer which was submitted following the final design review. The Resident shall forward the completed ITD-767 to the Local Roads Supervisor who will make distribution.

See Section 1-10.8 of the <u>Local Public Agency Guidelines Manual</u> for more information.

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